

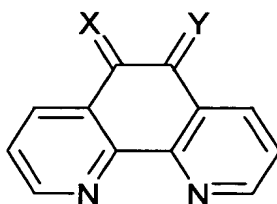
## IN THE CLAIMS

Kindly rewrite claims 1 and 18 as follows:

1. (Twice amended) A single use disposable electrode strip for attachment to the signal readout circuitry of a sensor system to detect a current representative of an analyte in an aqueous sample, the strip comprising:

a) an elongated support having a substantially flat planar surface, adapted for releasable attachment to said readout circuitry;

b) a first conductor extending along said surface and comprising a conductive element for connection to said readout circuitry;  
an active electrode on said surface in contact with said first conductor, said active electrode comprising a nicotinamide co-factor-dependent enzyme, a nicotinamide cofactor, and a mediator compound having the following formula:



where X and Y are independently [be] oxygen, sulphur,  $\text{CR}^3\text{R}^4$ ,  $\text{NR}^3$ , or  $\text{NR}^3\text{R}^4$  or the functional group  $\text{CZ}^1\text{Z}^2$ , where  $\text{Z}^1$  and  $\text{Z}^2$  are electron withdrawing groups; and  $\text{R}^3$  and  $\text{R}^4$  are independently a hydrogen atom, a hydroxyl group or a substituted or unsubstituted alkyl, aryl, heteroaryl, amino, alkoxyl, or aryloxy group, wherein said active electrode is formulated with filler and binder ingredients;

c) a second conductor extending along said surface, comprising a conductive element for connection to said readout circuitry;

d) a reference/counter electrode in contact with said second conductor;

e) said conductors being spaced apart so as not to be in electrical contact and being configured so as not to be brought into electrical contact when said aqueous sample is placed on said strip;

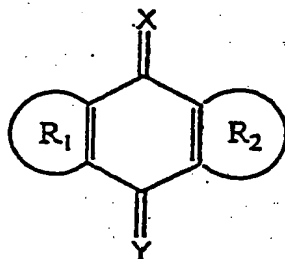
C1  
contd

f) said active electrode and said reference/counter electrode being configured so that both may be simultaneously covered by a small drop of said aqueous sample to provide an electrical conduction path between said electrodes.

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18. (Once amended) A single use disposable electrode strip for attachment to the signal readout circuitry of a sensor system to detect a current representative of an analyte in an aqueous sample, the strip comprising:

- a) an elongated support having a substantially flat planar surface, adapted for releasable attachment to said readout circuitry;
- b) a first conductor extending along said surface and comprising a conductive element for connection to said readout circuitry;
- an active electrode on said surface in contact with said first conductor, said active electrode comprising a nicotinamide co-factor-dependent enzyme, a nicotinamide cofactor, and a mediator compound having the following formula:
- C2



where X and Y are independently [be] oxygen, sulphur,  $\text{CR}^3\text{R}^4$ ,  $\text{NR}^3$ , or  $\text{NR}^3\text{R}^4$  or the functional group  $\text{CZ}^1\text{Z}^2$ , where  $\text{Z}^1$  and  $\text{Z}^2$  are electron withdrawing groups;  $\text{R}_1$  and  $\text{R}_2$  are independently an unsubstituted aromatic or heteroaromatic group; and  $\text{R}^3$  and  $\text{R}^4$  are independently [be] a hydrogen atom, a hydroxyl group or a substituted or unsubstituted alkyl, aryl, heteroaryl, amino, alkoxyl, or aryloxyl group, wherein said active electrode is formulated with filler and binder ingredients;

- c) a second conductor extending along said surface, comprising a conductive element for connection to said readout circuitry;
- d) a reference/counter electrode in contact with said second conductor;
- e) said conductors being spaced apart so as not to be in electrical contact and being configured so as not to be brought into electrical contact when said aqueous sample is placed on said strip;

C2  
Cont'd

f) said active electrode and said reference/counter electrode being configured so that both may be simultaneously covered by a small drop of said aqueous sample to provide an electrical conduction path between said electrodes.

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